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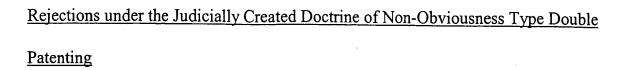
Claims 1, 2, and 11-18 are withdrawn from consideration as being directed to non-elected inventions. Claims 3-10 are pending. Claims 3-10 were rejected under the judicially created doctrine of non-obviousness type double patenting and under 35 U.S.C. § 112, first paragraph. Each of these rejections is addressed below.

Claim Amendments

Applicants have amended claim 3 to be directed to an isolated DNA molecule that encodes a grapevine leafroll virus (type 2) protein or polypeptide which includes the sequence of SEQ ID NO:3, 5, 7, 9, 11, 13, 15, 17, or 19. Support for this amendment, and for new claims 19-27, may be found throughout the specification, for example, at page 25, line 3, to page 47, line 4. Applicants also amend claims 5 and 7 to depend not only from claim 3, but also from new claims 19-27.

Draftsperson's Objections to the Drawings

Applicants replace current Figures 1-14 with formal Figures 1-14. No new matter has been added by this amendment.



Claims 3-10 stand rejected under the judicially created doctrine of non-obviousness type double patenting as being unpatentable over claim 2 of U.S. Patent Number 6,197,948. The Examiner acknowledged Applicants' statement that a terminal disclaimer will be submitted to address this rejection after allowable subject matter has been indicated, if appropriate.

Rejections under 35 U.S.C. § 112, first paragraph

Claims 3-10 stand rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter that is not adequately described in the specification. For the following reasons, this rejection may be withdrawn.

Applicants have amended claim 3 to indicate that the isolated grapevine leafroll virus (type 2) DNA molecule encodes a protein or polypeptide including the amino acid sequence of SEQ ID NO:3, 5, 7, 9, 11, 13, 15, 17, or 19. For the record, this amendment was made solely to expedite prosecution and Applicants reserve the right to pursue canceled subject matter in a continuing application.

Applicants submit that their specification provides adequate written description of the DNA molecules as now claimed. The specification at page 20, line 1, to page 47, line 4, provides the amino acid sequence for SEQ ID NOS:3, 5, 7, 9, 11, 13, 15, and 17, as





well as a grapevine leafroll virus (type 2) nucleic acid sequence encoding each of these amino acid sequences. Clearly, the claims are adequately described in the specification and, thus, the specification is in compliance with the written description requirement set forth in the M.P.E.P. at § 2163 and in the Office's Written Description Guidelines ("Guidelines") found at http://www.uspto.gov/web/menu/written.pdf (see, for example, Example 8 and the accompanying analysis). Withdrawal of this rejection of claim 3 and its dependent claims is requested.





Applicants submit that the application is in condition for allowance and such action is respectfully requested.

Enclosed are clean and "marked-up" versions of the claims.

Applicants note that the Examiner's Action was mailed to the incorrect address.

Effective immediately, please address all communication in this application to:

Paul T. Clark Clark & Elbing LLP 101 Federal Street Boston, MA 02110

Also enclosed is a check for \$532.00 in payment of the multiple dependent claim fee and the 14 excess dependent claims added. If there are any additional charges or any credits, please apply them to Deposit Account No. 03-2095.

Respectfully submitted,

Date: 18 February 2003

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<u>U.S. Patent Application Serial No. 09/613,486</u> <u>Version with Markings to Show Changes Made</u>

Cancel claims 4, 6, and 10, without prejudice.

Amend claims 3, 5, and 7, as follows.

- 3. (Amended) An isolated DNA molecule encoding a protein or polypeptide of a grapevine leafroll virus (type 2), wherein said protein or polypeptide comprises an amino acid sequence selected from the group consisting of SEQ ID NOS:3, 5, 7, 9, 11, 13, 15, 17, and 19.
- 5. (Amended) An expression system comprising a DNA molecule according to claim 3, 19, 20, 21, 22, 23, 24, 25, 26, or 27 in a vector heterologous to the DNA molecule.
- 7. (Amended) A host cell transformed with a heterologous DNA molecule according to claim 3, 19, 20, 21, 22, 23, 24, 25, 26, or 27.

Add new claims 19-27.

--19. (New) The isolated DNA molecule of claim 3, wherein said DNA molecule encodes a grapevine leafroll virus (type 2) protein or polypeptide comprising the amino acid sequence of SEQ ID NO:3.



- 20. (New) The isolated DNA molecule of claim 3, wherein said DNA molecule encodes a grapevine leafroll virus (type 2) protein or polypeptide comprising the amino acid sequence of SEQ ID NO:5.
- 21. (New) The isolated DNA molecule of claim 3, wherein said DNA molecule encodes a grapevine leafroll virus (type 2) protein or polypeptide comprising the amino acid sequence of SEQ ID NO:7.
- 22. (New) The isolated DNA molecule of claim 3, wherein said DNA molecule encodes a grapevine leafroll virus (type 2) protein or polypeptide comprising the amino acid sequence of SEQ ID NO:9.
- 23. (New) The isolated DNA molecule of claim 3, wherein said DNA molecule encodes a grapevine leafroll virus (type 2) protein or polypeptide comprising the amino acid sequence of SEQ ID NO:11.
- 24. (New) The isolated DNA molecule of claim 3, wherein said DNA molecule encodes a grapevine leafroll virus (type 2) protein or polypeptide comprising the amino acid sequence of SEQ ID NO:13.





- 25. (New) The isolated DNA molecule of claim 3, wherein said DNA molecule encodes a grapevine leafroll virus (type 2) protein or polypeptide comprising the amino acid sequence of SEQ ID NO:15.
- 26. (New) The isolated DNA molecule of claim 3, wherein said DNA molecule encodes a grapevine leafroll virus (type 2) protein or polypeptide comprising the amino acid sequence of SEQ ID NO:17.
- 27. (New) The isolated DNA molecule of claim 3, wherein said DNA molecule encodes a grapevine leafroll virus (type 2) protein or polypeptide comprising the amino acid sequence of SEQ ID NO:19.--



U.S. Patent Application Serial No. 09/613,486 Clean Version of all Pending Claims after Entry of the Present Amendment

- 3. (Amended) An isolated DNA molecule encoding a protein or polypeptide of a grapevine leafroll virus (type 2), wherein said protein or polypeptide comprises an amino acid sequence selected from the group consisting of SEQ ID NOS:3, 5, 7, 9, 11, 13, 15, 17, and 19.
- 5. (Amended) An expression system comprising a DNA molecule according to claim 3, 19, 20, 21, 22, 23, 24, 25, 26, or 27 in a vector heterologous to the DNA molecule.
- 7. (Amended) A host cell transformed with a heterologous DNA molecule according to claim 3, 19, 20, 21, 22, 23, 24, 25, 26, or 27.
- 8. The host cell according to claim 7, wherein the host cell is selected from the group consisting of Agrobacterium vitis and Agrobacterium tumefaciens.
- 9. The host cell according to claim 7, wherein the host cell is selected from a group consisting of a grape cell, a citrus cell, a beet cell, and a tobacco cell.



- 19. (New) The isolated DNA molecule of claim 3, wherein said DNA molecule encodes a grapevine leafroll virus (type 2) protein or polypeptide comprising the amino acid sequence of SEQ ID NO:3.
- 20. (New) The isolated DNA molecule of claim 3, wherein said DNA molecule encodes a grapevine leafroll virus (type 2) protein or polypeptide comprising the amino acid sequence of SEQ ID NO:5.
- 21. (New) The isolated DNA molecule of claim 3, wherein said DNA molecule encodes a grapevine leafroll virus (type 2) protein or polypeptide comprising the amino acid sequence of SEQ ID NO:7.
- 22. (New) The isolated DNA molecule of claim 3, wherein said DNA molecule encodes a grapevine leafroll virus (type 2) protein or polypeptide comprising the amino acid sequence of SEQ ID NO:9.
- 23. (New) The isolated DNA molecule of claim 3, wherein said DNA molecule encodes a grapevine leafroll virus (type 2) protein or polypeptide comprising the amino acid sequence of SEQ ID NO:11.





- 24. (New) The isolated DNA molecule of claim 3, wherein said DNA molecule encodes a grapevine leafroll virus (type 2) protein or polypeptide comprising the amino acid sequence of SEQ ID NO:13.
- 25. (New) The isolated DNA molecule of claim 3, wherein said DNA molecule encodes a grapevine leafroll virus (type 2) protein or polypeptide comprising the amino acid sequence of SEQ ID NO:15.
- 26. (New) The isolated DNA molecule of claim 3, wherein said DNA molecule encodes a grapevine leafroll virus (type 2) protein or polypeptide comprising the amino acid sequence of SEQ ID NO:17.
- 27. (New) The isolated DNA molecule of claim 3, wherein said DNA molecule encodes a grapevine leafroll virus (type 2) protein or polypeptide comprising the amino acid sequence of SEQ ID NO:19.